

occasions of the species either entering buildings to raid food cupboards, or dwelling within the wooden timbers of buildings and utilising an unknown food source. However, there was no available food source near the Great Hall and it seemed unlikely that the roof itself would be able to provide sufficient food, so further investigation was made.

Having realised that the only food source nearby would be either dead animal matter within the wooden beams or food outside, the roof was checked. Sure enough, *L. brunneus* was found on the masonry, though these appeared to be nesting within the masonry itself and could be watched entering holes beside one of the stones. Czechowski *et al.* (2002) note that the species is occasionally found in brick or stone buildings, though this may be the first time that this habit has been recorded in the UK. The only other ant species that was noticed sharing the castle roof with the *L. brunneus* were a small number of *L. niger* (L.) s.s.

Further observation of this colony clearly showed two trails of *L. brunneus* workers, one of which was followed about a metre to the carcass of a pill woodlouse (*Armadillidium* sp.). The workers were clearly scavenging from this carcass, carrying small pieces back to the nest.

The other trail led along some electrical cables, which went over the wall and about three metres down the side of the castle. These cables then fed into a hole in the wall, where honeybees *Apis mellifera* L. had made their nest. It is likely, therefore, that the ants were entering the bee colony and stealing honey. The bees themselves did not seem concerned and the steady stream of ants moving up and down the cables indicated that this may have been a major source of food. Certainly, it would more than make up for the lack of aphids and therefore honeydew on the castle roof, which is their normal food source (Czechowski *et al.*, 2002).

Another observation was the much smaller size of the masonry nesting *L. brunneus* when compared with those from inside the castle. The reasons for this seem unclear, as it would appear that their food supply would not be limiting their maximum size. One speculation is that the available crevices in the masonry were narrower than the beetle bore holes in wood that they normally nest in, and that this was in turn affecting the size of the ants themselves. This would lead to the conclusion that they do not excavate nest sites themselves, but instead rely entirely upon already available tunnels and crevices.

–MIKE LUSH, Just Ecology, The Old Wheelwrights, Ham, Berkeley, Gloucestershire GL13 9QH.

#### REFERENCES

- Attewell, P. J. 2004. *Lasius brunneus* (Latr.) (Hymenoptera: Formicidae): house ant, hero and coward. *British Journal of Entomology and Natural History* 17: 24.
- Czechowski, W., Radchenko, A. & Czechowska, W. 2002. *The ants (Hymenoptera, Formicidae) of Poland*. Museum and Institute of Zoology PAS, Warsaw.
- Jones, R.A. 2003. *Lasius brunneus* (Latr.) (Hymenoptera: Formicidae) found indoors. *British Journal of Entomology and Natural History* 16: 219.

---

**Female Oriental Fruit Moth *Grapholita molesta* (Busck) (Lepidoptera: Tortricidae) reared from larva found in nectarine**—On 12 September 2003 I purchased a 1 kg punnet of nectarines from the Lidl supermarket in Shirley, Southampton, Hampshire (VC 11), when I noticed a bore-hole in one of the fruits. The punnet-label specified the nectarines, *Prunus persica* (L.) Batsch var. *nectarina* (Aiton), as being Italian

variety Stark Red Gold. On carefully prising the flesh apart I found an orange-pink larva, which I placed in a  $7.5 \times 5 \times 2.5$  cm transparent Perspex box with fresh nectarine pieces. The food was replaced daily, but after the first day the larva showed a tendency to wander away from the food without feeding. By 14 September it had started spinning up in an upper corner of the box and on 17 September it pupated. The moth emerged on 28 September 2003, and was provisionally classified as *Grapholita* [= *Cydia*] *molesta* on the basis of a description (Bradley *et al.*, 1979) and summary Internet images of the larva and exhibited as such at the BENHS Annual Exhibition on 8 November 2003. Damage incurred during setting had prevented the adult from being reliably distinguished from *G. funebrana* (Treitschke) on the basis of wing morphology, and the specimen was therefore handed to Kevin Tuck, at the Natural History Museum, London, for confirmation. Dissection of the genitalia confirmed that it was indeed *G. molesta*, a female, based on comparison with the illustration in Razowski (2001). I am also grateful to the museum for providing photomicrographs of the slide preparation. These were produced using the Synoptics™ Imaging System, a Microsoft Windows-based system that analyses the field of view 10 pixels at a time at progressive focusing distances through the preparation, recording at each distance those components of the image which are in focus, and then combines these sets of components to give a sharp entire image. Separate photomicrographs of the bursa, sterigma and ostium were provided, and were then joined using the Adobe Photoshop image-editing program to produce the photograph shown in Fig. 1.

This specimen is the third *G. molesta* known to have been reared in Hampshire from imported fruit (see Goater & Norriss, 2001). However, the number reported by



Fig. 1. Genitalia of the female *Grapholita molesta*. Diagnostic features are the corpus bursa (at bottom) bearing two spine-like signa, and the sterigma (indicated by arrow) surrounding the ostium. For comparison see also Bradley *et al.* (1979). For explanation of genital anatomy see Scoble (1995). Dissection and photomicrography by Kevin R. Tuck.

consumers will almost certainly be lower than the total they encounter, on account of their tendency to discard infested fruit without further consideration. At the same time, the poor provision on the part of the UK agricultural pest monitoring agencies of specimens suitable for preservation has resulted in a paucity of genuine British adventives in museum collections. An enquiry to the distributors, Milani & Fragor Group S.p.A. of Verona, Italy identified the fruit batch and accordingly the insect as having originated from northern Italy, though they were unable to trace the specific locality. Following Mr Tuck's request, I was delighted to donate the specimen, together with the pupal exuviae and punnet-label, to the Natural History Museum collection where these are all now safely housed.—L. WINOKUR, Flat 3, Charles Court, 7 Darwin Road, Southampton, Hampshire SO15 5BS.

#### REFERENCES

- Bradley, J. D., Tremewan, W. G. & Smith, A. 1979. *British Tortricoid Moths. Tortricidae: Olethreutinae*. Ray Society, London. (Reproduced and released on CD in 2004 by Pisces Publications, Lymington, Hampshire).
- Goater, B. & Norriss, T. 2001. *Moths of Hampshire and the Isle of Wight*. Pisces Publications, Newbury and Hampshire County Council.
- Razowski, J. 2001. *Die Tortriciden Mitteleuropas*. F. Slamka, Bratislava.
- Scoble, M. J. 1995. *The Lepidoptera: Form, Function and Diversity*. The Natural History Museum and Oxford University Press.

---

**Ten additions to the Heteroptera (Hemiptera) of Cornwall.**—During the course of a detailed review of the Cornish bug fauna it has become apparent that a number of new county records have been made over the past fifteen years: *Kleidocerys resedae* (Panzer), Vicarage Cliff, Morwenstow (SS11), one at flowers of *Cochlearia danica* close to a wet valley with alders, 18.iv.2003; *Cymus melanocephalus* Fieber, Dizzard Wood (SX19), one swept, 13.vii.1989; *Physatocheila smreczynskii* China, Boconnoc Park (SX15), beaten from old orchard apple trees, 20.v.1990; *Nabis lineatus* Dahlbom, Cam Draught, Crackington (SX19), one in cattle-grazed wet valley with *Molinia* tussocks, 11.vii.1989; *Himacerus apterus* (Fab.), Boconnoc Park (SX15), off an open-grown hawthorn, 20.v.1990, and Ethy Park (SX15), 30.v.2000; *Psallus wagneri* Ossiannilsson, Dizzard Wood (SX19), male dissected, 10.vii.2001; *Orthocephalus coriaceus* (Fab.), Pednvanan, Porthcurnick (SW83), 20.viii.2002; *Heterocordylus genistae* (Scopoli), Lower Predannack Cliff (SW61), swept from *Genista tinctoria*, 14.vi.1989; Lizard Point (SW61), *G. tinctoria*, 15.vi.1989; Pedngwinian, Gunwalloe, Penrose Estate (SW62), plentiful on *G. tinctoria*, 5.vi.1989; *Orthotylus viridinervis* (Kirschbaum), Nare Head (SW93), beaten from elm, 4.vii.1989, and Cotehele (SX46), 21.vi.1989; *Mecomma dispar* (Boheman), Milllook Valley (SX19), single male swept, 10.vii.2001.

The results of the full county review will be published in due course. Anyone with bug records which they have not previously forwarded to the county records centre is invited to send the details to me as soon as possible if they would like them included.

Thanks to the Environmental Records Centre for Cornwall and the Isles of Scilly for access to their county record compilation and to the Cornwall and Isles of Scilly Federation of Biological Recorders for encouragement to publish. — KEITH N. A. ALEXANDER, 59 Sweetbrier Lane, Heavitree, Exeter EX1 3AQ.